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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,594	03/30/2001	Klaus Wehrend	112740-117	4492
29177	7590	08/21/2006	EXAMINER	
BELL, BOYD & LLOYD, LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			CHANG, RICHARD	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/806,594	Applicant(s) WEHREND ET AL.	
	Examiner Richard Chang	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2006.
- 2a) ☐ This action is **FINAL**.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7 and 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some * c) ☐ None of:
 - 1. ☐ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's arguments and amendments with respect to claims 7-12 have been fully considered but are moot in view of the new ground(s) of rejection. The finality of the rejection of last Office action is withdrawn.

Claim 8 had been canceled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 7 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent No. 6,041,054 ("Westberg") in view of US patent No. 6,330,239 B1 ("Suzuki").

Regarding claim 7, Westberg teaches a method for data transmission involved IP (internet protocol) over the ATM (asynchronous transfer mode) system wherein the traffic packets may be further subdivided into the AAL2 substructure elements inside the ATM cells (102 as IP over ATM transmission) (See Fig. 1, Col. 2, lines 43-50) comprising of

providing that each of the substructure elements (205, AAL2 mini packets within ATM cells) include both a cell header (302) and a useful data area (302, payload) (See Fig. 2 and Fig. 3, Col. 1, lines 30-56), and

inserting the substructure elements (205, AAL2 mini packets) into the data packets (210, ATM cell) (See Fig. 2, Col. 1, lines 30-42).

Westberg teaches substantially all the claimed invention for data transmission involved IP over the ATM system but did not disclose expressly an exchange of the IP over ATM network connections.

Suzuki teach an exchange apparatus for exchanging data between an ATM network and an IP communication network, wherein data transmission involves data packets conversion at exchange (10) between ATM network and IP packet-switched communication network comprising of transmitting, via an exchange (ATM device), data to be transmitted (AAL2 form in ATM cells) to an exchange (10) (in ATM format), inserting, via an exchange (10), the substructure elements (ATM cells) into IP data packets unchanged (in IP format), extracting, via an exchange (10), the substructure elements from the received data packets (ATM cells) (in IP format), and forwarding, via an exchange (10), to the receiving ATM device unchanged (in ATM format) (thus providing cell conversion for IP over ATM network (See Fig. 9, Col. 8, lines 7-42).

A person of ordinary skill in the art would have been motivated to employ Suzuki in Westberg in order to obtain a method for data transmission involved IP over the ATM system wherein the traffic packets may be further subdivided into the AAL2 substructure

elements inside the ATM cells and to take advantage of network exchange for connecting ATM and IP networks in claim 7.

The suggestion/motivation to do so would have been to connect network exchange for connecting ATM and IP networks by Suzuki in Col. 8, lines 7-42. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Westberg with the Suzuki to obtain the inventions specified in claim 7.

Regarding claim 9, as discussed above, this claim has limitation that is similar to those of claim 7 and Westberg further teaches that

storing, via a respective cell header (302) of a substructure element (301), a channel identifier (304, CID) for denoting assignment of the substructure elements (301 AAL2 mini packet) to a transmission destination, and

storing, via the respective cell header (302), an item of length information (305, Length) for indicating a number of useful data segments transmitted in the substructure element (301 AAL2 mini packet) (See Fig. 3, Col. 1, Lines 43-55), thus it is rejected with the same rationale applied against claim 7 above.

Regarding claim 10, as discussed above, this claim have limitation that is similar to those of claim 7 and Westberg further teaches that the substructure elements are structured on the basis of an Asynchronous Transfer Mode data format in accordance with an agreement known as second ATM adaptation layer AAL Type 2 (See Col. 3, lines 5-15), thus it is rejected with the same rationale applied against claim 7 above.

4. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent No. 6,041,054 ("Westberg") in view of US patent No. 6,330,239 B1 ("Suzuki") and further in view of US patent No. 6,229,821 B1 ("Bharucha et al.").

Regarding claim 11-12, as discussed above, Westberg and Suzuki teach substantially all the claimed invention but did not disclose expressly the particular application involving limitations of

"the substructure elements are arranged in a useful data area of a data packet such that a substructure element starts in a segment defined as first useful data segment of the data packet", and

"defining a pointer, in a segment defined as first useful data segment of an Internet Protocol data packet, which is used to denote a start address of a first substructure element situated in a useful data area of the Internet Protocol data packet".

Bharucha et al. teach an advanced method for utilizing the AAL2 mini packets inside the ATM cell/frame (See Fig. 2) for

the substructure elements (36, 37 ... AAL2 mini packets) are arranged in a useful data area (ATM payload data area) of a data packet (30 ATM cell) such that a substructure element (AAL2 mini packet) starts in a segment (36) defined as first useful data segment (1st AAL2 mini packet) of the data packet (30) (See Fig. 3 and Fig. 4, Col. 2, lines 28-43), and

defining a pointer (34 MSP), in a segment (31) defined as first useful data segment of an Internet Protocol data packet, which is used to denote a start address of

a first substructure element (AAL2 mini packet) situated in a useful data area of the Internet Protocol data packet as IP over ATM (See Fig. 4, Col. 2, lines 33-43).

A person of ordinary skill in the art would have been motivated to employ Bharucha et al. in Westberg and Suzuki in order to obtain a method for connecting access devices via a packet-oriented communication network wherein data traffic packets subdivided into AAL2 mini packets within ATM cells via a respective conversion device and to take advantage of arranging the 1st AAL2 mini packets in a useful ATM payload data area and further defining a MSP pointer to denote a start address of a first mini packet situated in a useful data area of the Internet Protocol data packet as IP over ATM in claims 11-12.

The suggestion/motivation to do so would have been to arrange the 1st AAL2 mini packets in a useful ATM payload data area and to further define a MSP pointer to denote a start address of a first mini packet situated in a useful data area of the Internet Protocol data packet as IP over ATM, as suggested by Bharucha et al. in Col. 2, lines 28-43. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Bharucha et al. with Westberg and Suzuki to obtain the inventions specified in claims 11-12.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Chang whose telephone number is (571) 272-3129. The examiner can normally be reached on Monday - Friday from 8 AM to 5 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


rkc

Richard Chang
Patent Examiner
Art Unit 2616


RICKY Q. NGO
SUPERVISORY PATENT EXAMINER